Stanford University

Summer 2019

MS&E 260: Introduction to Operations Management

Final Thoughts Paper

*Due on Wednesday, August 14th, 10:30am PDT*

Provide your thoughts which address any of the following:

* What topics from MS&E 260 have you found particularly interesting and why?
* How do you plan to utilize what you have learned from MS&E 260 in your career?
* How may your experience in MS&E 260 influence your future academic studies?
* Are there any other final thoughts regarding MS&E 260 you would like to communicate to the teaching staff?

Please limit your responses to one page.

Submitted by: Vishal Mittal (X250025)

MS&E 260, Introduction to Operations Management course is a great course that deals with very important baseline concepts of operations. During the course of study we went through important topics such as inventory management models, service levels, capacity optimization and queueing, supply chain management, revenue management, and decision trees analysis. All of these topics brought some insight in the way we think about anything we see around us. Inventory management and supply chain management are very interesting topics for me. The amount of thinking and process behind getting a box of cereals to a store is just amazing. It’s always there at the right aisle, marked with the right price and available at the right time. Going to a store and picking up box of cereals is so convenient and I never thought earlier the inventory models and supply chain used behind that one box.

Another favorite topic of mine is the decision analysis. The insight that a decision tree provides in confirming the robustness of the decision is just amazing. With no test sample every decision looks like a fifty-fifty chance decision. But by entering a couple of test points the decision starts to lean in a particular way. Not only it helps to take a decision but also let’s user analyze the effects of changing parameters on overall picture. The question related to all the topics in homework and mid-term were very well designed to portray the importance of all the topics in real life.

Taking this course has changed the way I see things in a very good manner. I happen to go to DMV after the queueing model lecture, and this time I saw the queue there with a different mindset. This time I wasn’t frustrated, but I looked at it as a problem that I can probably help solving. When I went to Safeway and my favorite ice cream was not in stock, I suddenly said to my friends that they had a stock out of this item. As a profession I am a software engineer, and now I think of lead time in all the tasks assigned to me. I used to start one task at a time and finish it and then pick another one. But now I give relevant tasks a start and during the lead time of that task I am not blocked and can do other task. Same goes for decision making. Just a quick mental decision tree of all possible outcomes helps a lot in taking the right decisions.

This summer, I have started my graduate certificate here at Stanford University in Management Science and Engineering. This is the first course that I took as a part of certificate. I am very happy with it and it makes my decision robust to continue the graduate certificate and eventually apply for a full time MBA. If I have to find something to change in the course, at the beginning of the course I would add a half hour refresher lecture / problem session about various distributions. I and all the classmates I met have studied normal, uniform, exponential, etc. distributions. It’s just that the perspective might have been different at the earlier education. It might help in understanding the lectures and problems earlier. Both course assistants helped us a great deal in clarifying our doubts and filling up the knowledge gaps if any. All in all this course has been a very thoughtful and inspiring experience this summer.